

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLN. OF: Ogawa)

FILED: March 6, 2002)

FOR: Optical Recording Medium as Well as Method
and Device for Recording and Reading Same

DOCKET: NEC PNDF-01247

Commissioner of Patents & Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

Applicant respectfully requests that you make the following amendments prior to examination.

IN THE CLAIMS:

Please amend claims 7 and 14 as follows:

7. (Amended) A method for recording and reading signals with respect to an optical recording medium claimed in claim 1, comprising the steps of:

detecting a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

thereafter, detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

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utilizing information which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section to record or read said signals with respect to said optical recording medium.

14. (Amended) A device for recording and reading signals with respect to an optical recording medium claimed in claim 1, comprising:

a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

a wobbled intermittent section detecting section for detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

a control section for taking out information, which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section, based on detection signals from said wobbled intermittent section detecting section and utilizing said information thereby to record or read signals with respect to said optical recording medium.

Please add new claims 15-30 to read as follows:

--15. A method for recording and reading signals with respect to an optical recording medium claimed in claim 2, comprising the steps of:

detecting a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

thereafter, detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

utilizing information which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section to record or read said signals with respect to said optical recording medium.

16. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 15, wherein:

the signals represented by said wobbled intermittent sections are detected by means of two comparators in each of which the upper limit is compared with the lower limit with respect to said push-pull signals as well as of reference signals in synchronous with wobble signals.

17. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 15, wherein:

one of said two comparators detects a first level or higher levels of said push-pull signals, the other comparator detects a second level or lower levels of said push-pull signals, and the detection signals obtained from these comparators are compared with said reference signals, whereby signals from the wobbled intermittent sections are detected.

18. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 16, wherein:

one of said two comparators detects a first level or higher levels of said push-pull signals, the other comparator detects a second level or lower levels of said push-pull signals,

and the detection signals obtained from these comparators are compared with said reference signals, whereby signals from the wobbled intermittent sections are detected.

19. A method of recording and reading signals with respect to an optical recording medium as claimed in claim 16, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

20. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 17, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

21. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 18, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

22. A device for recording and reading signals with respect to an optical recording medium claimed in claim 2, comprising:

a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

a wobbled intermittent section detecting section for detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

a control section for taking out information, which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section, based on detection signals from said wobbled intermittent section detecting section and utilizing said information thereby to record or read signals with respect to said optical recording medium.

23. A method for recording and reading signals with respect to an optical recording medium claimed in claim 3, comprising the steps of:

detecting a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

thereafter, detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

utilizing information which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section to record or read said signals with respect to said optical recording medium.

24. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 23, wherein:

the signals represented by said wobbled intermittent sections are detected by means of two comparators in each of which the upper limit is compared with the lower limit with respect to said push-pull signals as well as of reference signals in synchronous with wobble signals.

25. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 23, wherein:

one of said two comparators detects a first level or higher levels of said push-pull signals, the other comparator detects a second level or lower levels of said push-pull signals, and the detection signals obtained from these comparators are compared with said reference signals, whereby signals from the wobbled intermittent sections are detected.

26. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 24, wherein:

one of said two comparators detects a first level or higher levels of said push-pull signals, the other comparator detects a second level or lower levels of said push-pull signals, and the detection signals obtained from these comparators are compared with said reference signals, whereby signals from the wobbled intermittent sections are detected.

27. A method of recording and reading signals with respect to an optical recording medium as claimed in claim 24, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

28. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 25, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

29. A method for recording and reading signals with respect to an optical recording medium as claimed in claim 26, wherein:

each cycle of said reference signals corresponds to each half cycle of said push-pull signals.

30. A device for recording and reading signals with respect to an optical recording medium claimed in claim 3, comprising:

a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

a wobbled intermittent section detecting section for detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and


a control section for taking out information, which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section, based on detection signals from said wobbled intermittent section detecting section and utilizing said information thereby to record or read signals with respect to said optical recording medium.

REMARKS

The claims have been amended to remove multiple dependencies. The Applicant requests that the filing fee be calculated based on the claims as amended. Examination of the application, as amended, is respectfully requested.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 08-1391.

Respectfully submitted,



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7. (Amended) A method for recording and reading signals with respect to an optical recording medium claimed in [any one of claims 1 through 6] claim 1, comprising the steps of:

detecting a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

thereafter, detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

utilizing information which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section to record or read said signals with respect to said optical recording medium.

14. (Amended) A device for recording and reading signals with respect to an optical recording medium claimed in [any one of claims 1 through 6] claim 1, comprising:

a first wobbled intermittent section for determining reference position placed at at least one reference position in said optical recording medium from push-pull signals detected from wobble;

a wobbled intermittent section detecting section for detecting a wobbled intermittent section or wobbled intermittent sections other than said first wobbled intermittent section each of which is selectively disposed at a predetermined position apart from said reference position by a predetermined distance; and

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a control section for taking out information, which has been recorded in said wobbled intermittent section or sections other than said first wobbled intermittent section, based on detection signals from said wobbled intermittent section detecting section and utilizing said information thereby to record or read signals with respect to said optical recording medium.

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